

# West Dover Connector

## (Saulsbury Road Extension)

### Working Group

*Meeting No. 5*  
*Modern Maturity Center*  
*March 23, 2005*



# Agenda

New Working Group Members & DMJM Harris Project Manager	Jay Kelley
Review Progress Regarding Working Group Activities	Bob Kramer
November Public Workshop Results	Bob Kramer
Rodney Village Civic Association Meetings	Bob Kramer
Other Project Meetings	Jay Kelley
Status of Eden Hill Farm	Dawn Melson
Project Development and Study Schedule	Mike Girman
Preliminary Alternatives Screening	DMJM+HARRIS
Questions and Answers	Bob Kramer
Next Meeting/Adjourn	Bob Kramer

# New Working Group Members

- Mayor of the Town of Wyoming:  
Hans Riegle
- Rodney Village Civic Association President:  
Patricia Gauani

# New DMJM+HARRIS Project Manager

- New Project Manager:  
Michael J. Girman, III  
DMJM+HARRIS, Inc.

# Project Notebook







- Tab 1 – Meeting Slides
- Tab 2 – 10/20/04 Working Group Meeting Minutes
- Tab 3 – Summaries of Rodney Village Civic Association (RVCA) Meetings  
Proposal from RVCA Planning Committee
- Tab 4 – Purpose and Need Statement
- Tab 5 – Screening Matrices
- Tab 6 - Preliminary Alternative Maps

# Review Working Group Progress






- We're at *Meeting #5* of the Working Group
- *Review Progress*
  - *Working Group Meeting #1*
    - Reviewed traffic and development information
  - *Working Group Meeting #2*
    - Reviewed natural and built environmental features and civil features
    - Generated ideas for the West Dover Connector in breakout groups
  - *Working Group Meeting #3*
    - Conducted field tour by bus of study area
    - Agreed on Working Group's goals and objectives
    - Reviewed West Dover Connector concepts developed from Working Group's ideas
    - Commented on likes and dislikes for each concept in breakout groups with a homework assignment on likes/dislikes
  - *Working Group Meeting #4*
    - Reviewed feedback received on likes/dislikes for each concept



# West Dover Connector Concepts

Map	Description	Map	Description
	# 1 No-Build		# 4 Tie in to Webbs Lane to US 13; Auxiliary Connection to Wyoming Mill Rd.
	# 2A - 2D Tie in to New Burton Road Only		# 5A - 5C Tie in to (or in the vicinity of) Charles Polk Road to US 13; Auxiliary Connection to Wyoming Mill Rd.
	# 3 Tie in to Wyoming Avenue to US 13		# 6 Bypass around Towns of Camden and Wyoming to US 13

# West Dover Connector Concepts

Map	Description	Map	Description
	# 7A - 7C Connect to New Burton Road; Use New Burton Road and Connect to (or in the Vicinity of) Charles Polk Road to US 13		# 9 Connect Wyoming Mill Road to (or in the Vicinity of) Charles Polk Road to US 13
			# 10 Widen North Street from Saulsbury Road to Governors Avenue
	# 8 Connect Wyoming Mill Road to Webb's Lane to US 13		# 11 Transportation System Management (TSM)



# West Dover Connector “New” Concepts

- RVCA Planning Committee submitted a proposal to DelDOT
- Project team has developed an additional concept
- These new concepts and any others will be reviewed and evaluated by the Project Team
- Results will be presented at future Working Group meetings

# Breakout Group Support Summary – from the September 22<sup>nd</sup> WG Meeting

Concept →	1	2	3	4	5	6	7	8	9	10
Group ↓										
Marge	×	√	√	×	×	×	√	×	×	×
Evio	√	×	×	√	√	×	√	×	×	×
Ed	×	×	×	×	√	×	×	×	×	×
Andrew	×	×	√	×	√	×	×	×	×	×
Chris	×	√	√	√	√	×	√	×	×	×
Erich	×	√	√	√	√	×	√	×	×	×
Some or Full Support (√)	1	3	4	3	5	0	4	0	0	0
No Support (×)	5	3	2	3	1	6	2	6	6	6

General lack of Working Group support for Concepts 6, 8, 9, and 10

# Working Group Homework Response

- *Homework Responses from September Meeting Discussed at October Meeting:*
  - Working Group Member Response
    - 17 out of 38 members (45% response rate)
  - Feedback from Homework **Confirmed** September 22<sup>nd</sup> Meeting Results:
    - Lack of Working Group support for Concepts 6, 8, 9, and 10

# November 10, 2004 Public Workshop

- Very well-attended: 202 members of the public & 23 Working Group members
- Most attendees recognized the need to do something to relieve traffic now and accommodate future demand
- Reviewed Concepts:
  - Maps & Working Group Feedback
- Received a few ideas from the public – similar to identified concepts
- Echoed the Working Group - General lack of support for Concepts 6, 8, 9, and 10
- Concerns expressed by some Rodney Village residents about impacts of concepts on their community

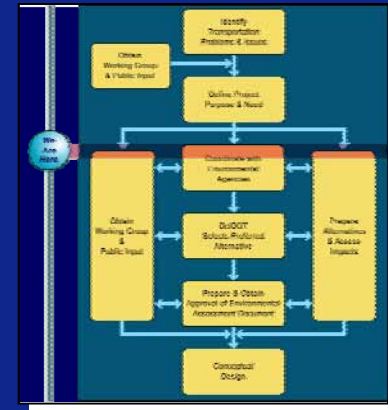
# Rodney Village Civic Association Meetings

- Invited to attend two Civic Association meetings: December 2, 2004 & January 27, 2005
- Well-attended: 75 members attended in December and 34 attended in January
- No formal presentation; only brief introductory remarks regarding study status
- Members asked questions, provide comments and expressed concerns



# Other Project Meetings

- Resource Agencies:
  - Met with agencies in January 2005 – brief update, Project Team will provide Purpose and Need Statement
  - Will meet with agencies in April 2005 – review preliminary alternatives and screening results
- Federal Highway Administration:
  - Met in January 2005 and subsequently concurred on Purpose and Need Statement (Tab 4)
- Kraft Foods:
  - Major employer and truck traffic generator
  - Access issues

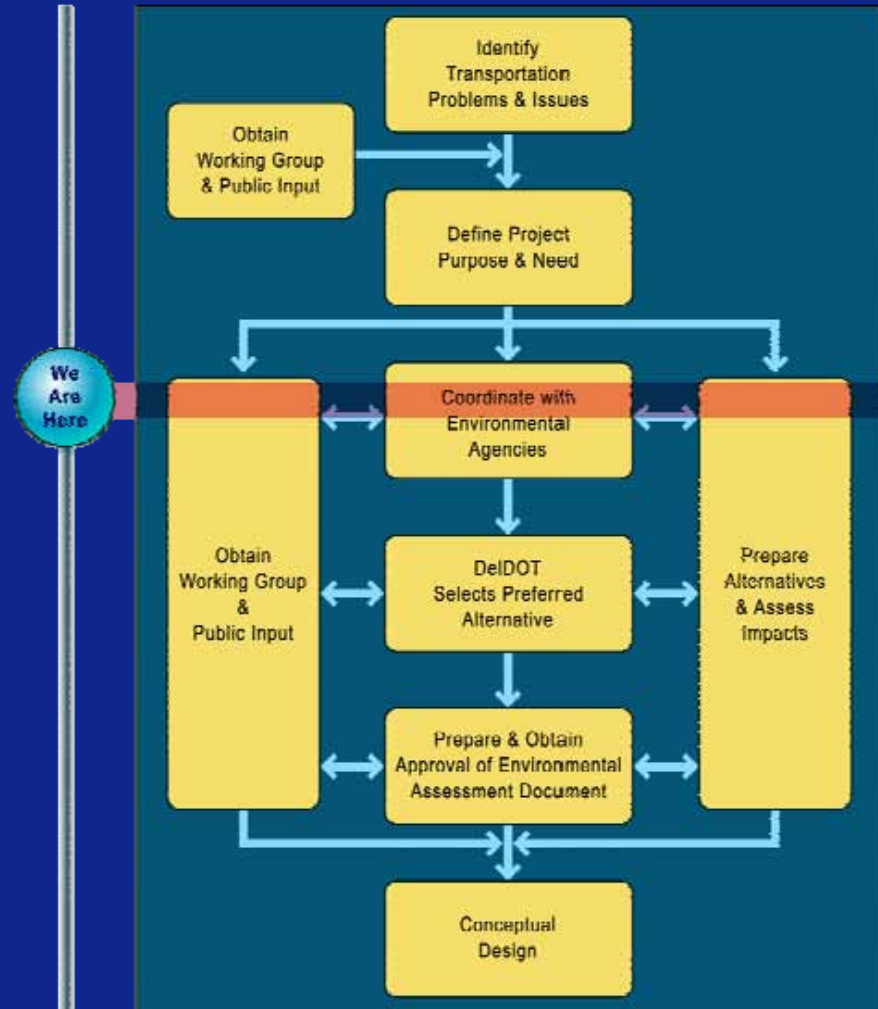


# Status of Eden Hill Farm

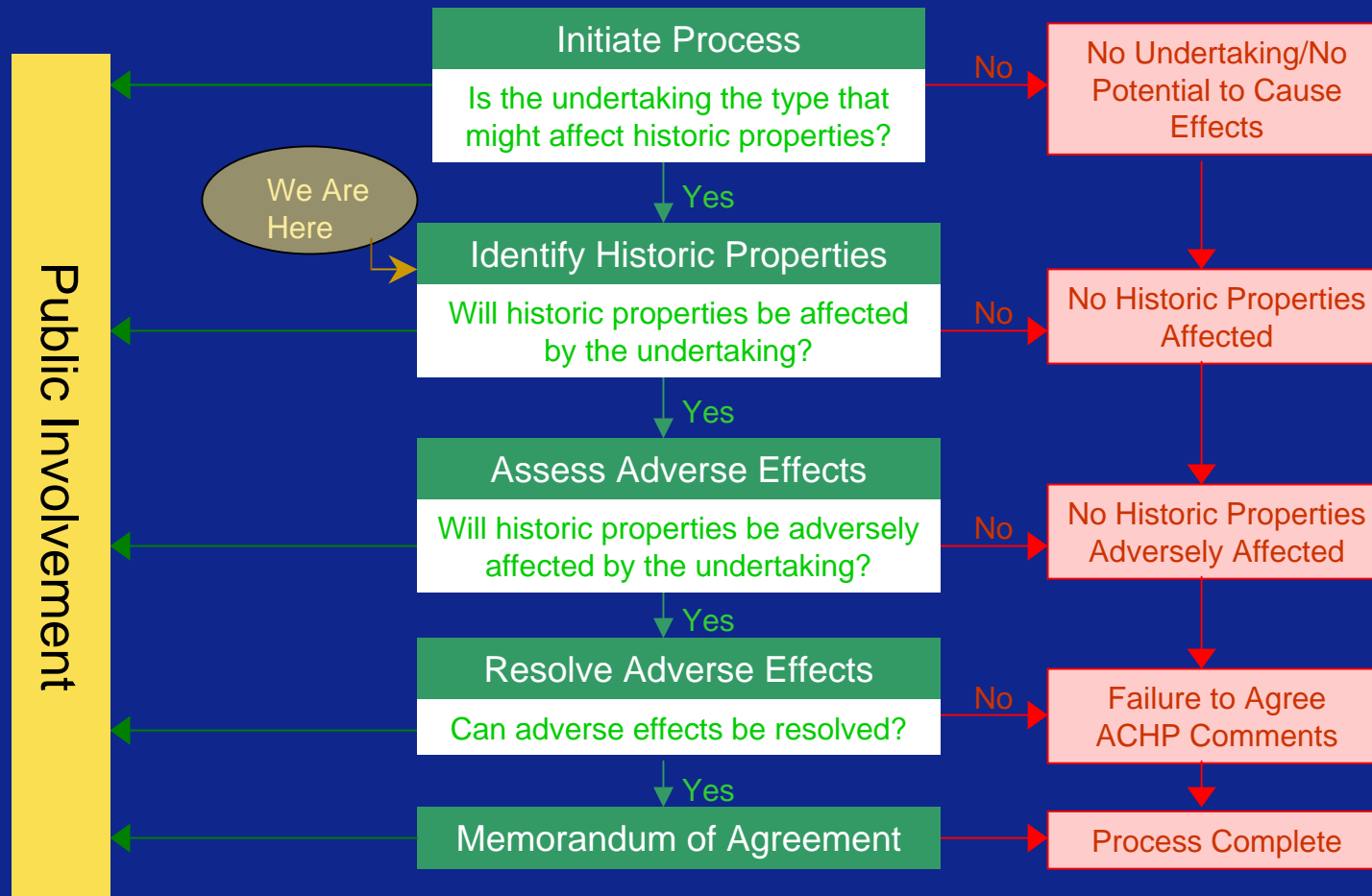
- New Zoning Classification Adopted by City of Dover (Traditional Neighborhood Design/TND)
- Conceptual Development Plan Reviewed by Preliminary Land Use Service (PLUS) at meeting held on December 22, 2004
- Rezoning of Eden Hill Farm Necessary from IP/Ag (Industrial Park and Agriculture) to TND

# Project Development Process

- Involve & Coordinate With Environmental Agencies
- In Detailed Studies, Quantify Impacts Of Each Alternative On:
  - **Socioeconomic Resources**
    - Potential Residential Property Displacements
    - Potential Commercial Property Displacements
    - Public Facilities/Services
  - **Natural Resources**
    - Wetlands
    - Floodplains
    - Stream Crossings
    - Productive Agricultural Land
    - Prime Agricultural/State Agricultural District Lands
    - Parklands
    - Forest Land
    - Sensitive Waste Sites
  - **Cultural Resources**
    - Known Archeological Resources
    - Potential Historic Resources
    - Potential Historic Districts
    - National Register Listed/Eligible Properties



# Project Development & Cultural Resource Studies (Section 106 Process)



# Updated Study Schedule

Activity	2003	2004												2005												2006							
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun		
Project Elements																												<div>WORKING GROUP ACTIVITIES TO BE DETERMINED</div>					
Base Data Acquisition																																	
Problem Background Documentation																																	
Environmental Screening Process																																	
Alternatives Development																																	
Alternatives Evaluation and Refinement																																	
NEPA Documentation																																	
Public Involvement																																	
Public Workshops		◆										◆							◆						◆			◆			◆		
Working Group Meetings						◆	◆		◆	◆					◆	◆	◆				◆	◆	◆			◆		◆			◆		
Stakeholder Outreach Efforts																																	

WORKING GROUP  
ACTIVITIES TO  
BE DETERMINED



# Concepts to Preliminary Alternatives

- Project team refined Working Group and public concepts identified to date based on engineering criteria
- Preliminary engineering studies conducted to transform these concepts into preliminary alternatives

# Preliminary Alternatives Screening

Two Step Process Utilized:

- ① Traffic Benefits of Each Preliminary Alternative Compared Against the No-Build Alternative

*Purpose: Identify preliminary alternatives that have little or no travel benefit to study area*

*Results: Traffic analysis results support the perception of Working Group members and general public – 6, 8, 9 and 10 have little/no traffic benefit to the study area based on purpose and need.*

# Preliminary Alternatives Screening

Two Step Process Utilized:

- ② Potential Natural and Built Environmental Impacts Assessed for Transportation System Management (TSM) Alternative and Preliminary Alternatives With Support from Working Group and Public (Prelim. Alts. 1, 2, 3, 4, 5, 7 & 11)

# Preliminary Alternatives Screening

## Traffic Factors

Traffic circulation

North Street intersection performance improvement

Traffic reduction on Camden-Wyoming Avenue

Reduction in through traffic\*

Improved access and mobility across NS railroad within study area

\*Reduction in (cut-) through traffic on streets between New Burton Road and Governors Avenue

# Preliminary Alternatives Screening

## Natural and Built Environment Factors

Number of Displacements/Acreage of Right of Way Required

Impacts to Streams

Impacts to Wetlands

Impacts to Floodplains

Impacts to Agricultural Land

Impacts to Cultural Resources (to be determined in detailed study)



# Traffic Analysis Studies

- Traffic flow analysis (at roadway segment level) for all the preliminary alternatives except the TSM\* alternative
- Analysis of TSM Alternative (at intersection level) and comparison with No-Build
- Comparison of all preliminary alternatives with No-Build based on purpose and need

\* TSM alternative includes minor system improvements at intersections. Thus, traffic flow analysis is not applicable for the TSM alternative.

# Traffic Flow Analysis

- Travel demand model provided traffic forecasts for each preliminary alternative for 2015 and 2030
- Traffic patterns from the travel demand model provided understanding of traffic flow for each preliminary alternative
- The model outputs were assessed against study's purpose and need to determine potential benefits of each of the preliminary alternatives

# Traffic Comparison of Preliminary Alternatives (Tab 5)

- All preliminary alternatives were compared for 2015 and 2030 with the No-Build alternative
- Potential benefits relating to following objectives were assessed:
  - Traffic circulation
  - Potential North Street intersection performance improvement
  - Traffic reduction on Camden-Wyoming Avenue
  - Reduction in through traffic
  - Improved access and mobility across NS railroad within study area

# Traffic Performance Symbols



●	Most Improvement
●	Moderate Improvement
O	Low Improvement / No Impact
O-	Negative Impact

# Traffic Circulation

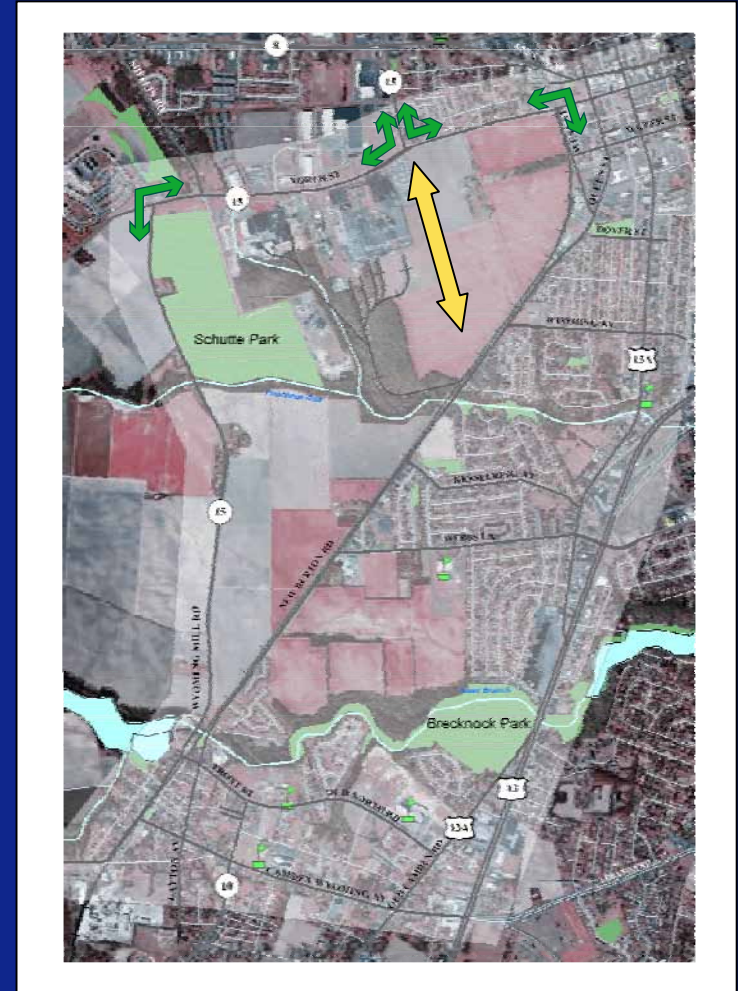
- Improve continuity for traffic movements around Schutte Park and Eden Hill Farm
- Volume reduction in movements around Eden Hill Farm and Schutte Park
- Reduction in trip lengths
- Highest benefits from Preliminary Alternatives 2A, 2B, 2C, 3, 4 and 7





# Potential North Street Intersection Performance Improvements

- Reduction in turning movements at North Street intersections
- Significant number of turning movements would become through movements at the intersection of North Street and Saulsbury Road
- Reduced turning movements help improve intersection performance and safety
- Highest benefits from Preliminary Alternatives 2, 3, 4, 5 and 7



# Traffic Reduction on Camden-Wyoming Avenue

- Traffic reduction on Camden-Wyoming Avenue due to traffic using parallel routes in the vicinity (Preliminary Alternatives 4, 5 and 7)
- Potential for heavy vehicle traffic diversion from historic towns of Camden and Wyoming



# Reduction in Through Traffic

- Reduction in through trips on streets between New Burton Road and Governors Avenue
- Highest benefit provided by Preliminary Alternatives 3,4 and 5





# Improved Access and Mobility Across NS Railroad

- Improved access and mobility across NS Railroad within the study area (with an underpass or overpass crossing of NS Railroad)
- Improved access and mobility for emergency response vehicles
- Improved access and mobility for heavy vehicles

# Preliminary Alternatives Comparison Summary

- Traffic analysis results support the perception of Working Group members and general public
  - Preliminary Alternatives 6, 8, 9 and 10 had little support from the Working Group and general public.
    - Traffic analysis does not show significant traffic benefits to the study area for these alternatives
  - Preliminary Alternatives 2, 3, 4, 5 and 7 have more support from the working group and general public.
    - Traffic analysis shows moderate to significant traffic benefits to the study area for these alternatives

# Transportation Systems Management (TSM) Alternative

- Traffic Analysis included Comparison between –
- ① Existing Condition (2003) Intersection Performance
  - ② 2015 & 2030 No-Build Condition Intersection Performance (includes Committed Improvements)
    - Already Planned by DelDOT
    - Funded
  - ③ 2015 & 2030 Intersection Performance with TSM Improvements that include the above plus -
    - Signalization where Warranted
    - Modification of Signal Phasing and/or Timing
    - Minor Intersection Approach Widening

# No-Build Vs TSM Improvement Results

Condition	No. of Intersections with Acceptable Level of Service* / Total Studied Intersections	
	No-Build**	TSM Improvements**
2003 Existing	20/25	20/25
2015 Future	9/25	17/25
2030 Future	3/25	11/25

\* LOS A through LOS D

\*\* Includes DelDOT Committed Improvements



# TSM Alternative Summary

Significant roadway improvements beyond TSM improvements will be required to improve overall traffic operations

- TSM Alternative does not achieve study objectives that include:
  - Improve traffic circulation on the west side of City of Dover
  - Improve mobility and access across the NS Railroad
  - Discourage through traffic movements on “cut-through” streets
  - Improve connections between neighborhoods, parks and businesses
- TSM analysis does not specifically include proposed Eden Hill Farm Development related traffic

# Preliminary Alternatives Comparison Summary - Natural and Built Environment (Tab 5)

- All preliminary alternatives except 6,8,9 and 10 were compared with the No-Build alternative
- Impacts to resources were assessed:
  - Based on preliminary bandwidths, not actual roadway widths
  - Preliminary alignments were based on:
    - 40 mph design speed (main roadway)
    - 30 mph design speed (auxiliary ramps & roads)

# Environmental Impacts Summary

- Preliminary Alternatives 2, 3, 4, 5, 7 and 11 were evaluated for environmental impacts for two reasons:
  - Traffic analysis determined these preliminary alternatives meet Working Group goals and objectives and Project Purpose and Need.
  - These preliminary alternatives have some support from the Working Group and general public.
- Preliminary Alternatives 6, 8, 9 and 10 were not evaluated for environmental impacts for two reasons:
  - Traffic analysis determined these preliminary alternatives do not meet Working Group goals and objectives and Project Purpose and Need.
  - These preliminary alternatives have little support from the Working Group and general public.

# Environmental Impact Symbols



●	No Impact
◉	Minimal Impact
○	Moderate Impact
○-	Most Impact

# Environmental Impacts Summary

- Most impact in terms of number of displacements – Preliminary Alternatives 5A and 7, followed by 5B, 5C and 3
- Most right of way needed for Preliminary Alternatives 2D, 4 and 5
- Impact to wetlands and floodplains limited to the Puncheon Run area– Preliminary Alternatives 2D, 4, 5 and 7
- AG district impacts associated only with extensions to Wyoming Mill Road in Preliminary Alternatives 4 and 5

# Preliminary Alternatives Screening

Traffic Factors	Natural & Built Environmental Factors
Traffic circulation	Number of displacements
North Street intersection performance improvement	Acreage of Right-of-Way required
Traffic reduction on Camden-Wyoming Avenue	Stream impacts
Reduction in through traffic	Wetland impacts
Improved access and mobility across NS railroad within study area	Floodplain impacts
	Agricultural land impacts

# Meeting Summary

- Questions/Comments???



# Next Meeting

## Working Group Meeting

Wednesday, April 6, 2005

5:30PM

Modern Maturity Center, DuPont Ballroom